A.3.12 AOC 30

Description

AOC 30 consists of the Tank 27 Pipeway area as depicted in Figure A.3.12. Chevron identified Tank 27 Pipeway North as an AOC when an assessment of the northern berm wall was being conducted to expand the limits of the basin. Chevron noted petroleum impacted soils which appeared historic in nature. Chevron excavated the extent of the stained soils and performed post-excavation sampling to ensure that the limits of contamination were defined and removed.

In August 1999, Chevron excavated the extent of the visually impacted soils in the northern area of the Pipeway. Once complete, the excavation measured approximately 470 feet in perimeter and encompassed approximately 8,900 square feet. The excavation varied in depth, with a maximum depth of approximately eight inches. Approximately 100 cubic yards of soil were subsequently stockpiled directly east of the excavation area.

Soil

A total of 10 post-excavation samples were collected after excavation activities as described in the Third Quarter 1999 Progress Report. Eight samples were collected from the lower most six inches of the excavation sidewall, around the perimeter of the excavation, and two samples were collected from the excavation floor. Sampling locations were also biased to areas exhibiting the highest PID readings or visible signs of residual contamination. The ten samples were analyzed for TPH. Contingent VOC and SVOC analyses were performed on three of the samples exhibiting the highest TPH results (PE139, PE143 and PE144). The contingent analyses included Skinner List VOCs and SVOCs. The specific locations of these borings are shown on Figure A.3.12, and the results are summarized on Table A.3.11. Only one of the post-excavation samples (PE0143) contained TPH (16,000 mg/kg) and benzo(a)anthracene (0.98J mg/kg) above the applicable soil delineation criteria.

During the Full RFI, Chevron installed an additional boring/monitoring well (S0814/MW-130) at AOC 30. The soil samples from S0814/MW-130 were analyzed for TCL VOCs and SVOCs, and TAL metals. No odors, staining or other evidence of petroleum-related impacts were noted at AOC 30, and no COCs were detected in excess of the delineation criteria. A summary of all the soil data for AOC 30 is included in Table A.3.11.

As discussed further in Section 6 of the RFI Report, lateral delineation of selected COCs has been completed on a site-wide basis for each Yard. The delineation of these COCs is depicted graphically on the figures provided in Section 6.

The SPLP sample from MW-130 (S0814B3) contained 7.79 mg/L of naturally-occurring aluminum and 5.95 mg/L of naturally-occurring iron, which exceed the applicable criteria

for SPLP aluminum (2.2 mg/L) and SPLP iron (3.3 mg/L), respectively[1]. No other metals were detected above applicable SPLP criteria in this sample. Therefore, the soils are not a source of metal impacts to groundwater.

Groundwater

Two groundwater samples (H0550 and H0551) were collected and analyzed for Skinner's List VOCs, SVOCs and metals. Numerous metals were detected in concentrations greater than the site delineation criteria. However, based on a comparison of hydropunch samples (collected via traditional methods as well as with porous media) to samples from nearby monitoring wells, SVOC and metals data collected from temporary well points are not considered to be representative of ambient groundwater conditions. Furthermore, no COCs were detected above the applicable groundwater delineation criteria in the December 2002 groundwater sample from MW-130.

Summary

Although benzo(a)anthracene (0.98J mg/kg) and TPH (16,000 mg/kg) were detected above the applicable soil delineation criteria at one location (PE0143), the potentially-impacted area has been fully delineated. No other COCs were detected above the delineation criteria in any of the other soil samples from this AOC. Furthermore, there were no exceedances of any COCs in the groundwater samples collected in December 2002 from MW-130, so it is unlikely that soils at AOC 30 are a source of metals impacts to groundwater. Nonetheless, impacted soils at AOC 30 will be included for further evaluation in the CMS.

[1]Based on the groundwater criterion for aluminum (200 µg/L), DAF = 11, and for iron (300 µg/L), DAF = 11.